## (19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 16 June 2005 (16.06.2005)

PCT

## (10) International Publication Number WO 2005/053681 A2

- A61K 31/366, (51) International Patent Classification7: 31/336, 31/40, 31/405, 31/663, A61P 3/10, 19/00
- (21) International Application Number:

PCT/GB2004/005019

(22) International Filing Date:

29 November 2004 (29.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0327742.3

28 November 2003 (28.11.2003)

- (71) Applicant (for all designated States except US): ISIS IN-NOVATION LIMITED [GB/GB]; Ewert House, Ewert Place, Summertown, Oxford, Oxfordshire OX2 7SG (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): SEWELL, Andrew [GB/GB]; University of Oxford, Nuffield Department of Clinical Medicine, Peter Medawar Building, South Parks Road, Oxford OX1 3SY (GB).
- (74) Agent: LORD, Hilton, David; Marks & Clerk, 90 Long Acre, London WC2E 9RA (GB).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN. CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL USES OF KNOWN DRUGS

(57) Abstract: Statins are able to block the mevalonate pathway at an early stage, preventing build up of isopentenyl pyrophosphate by nitrogen containing bisphosphonates by blocking the pathway further downstream, with medicaments containing statins being administered at an appropriate time being able to thereby prevent the build up of IPP, which has been found to activate γδ T cells and cause the acute phase response associated with the nitrogen containing bisphosphonates.

